Appendix P: Thermal Barriers

WAP Requirements

All sheet foam and/or two-part spray foam materials that are purchased and/or installed by the WAP during a project shall at minimum be covered with an acceptable thermal or ignition barrier whenever the material is installed in an accessible living space and the material covers a continuous area greater than 30 square feet.

Notable Exceptions To & Clarification About the Requirements Above

- The rules of an authority having jurisdiction (AHJ) shall always supercede WAP requirements. WAP requirements shall be used as the default requirements only in the absence of another AHJ. Whenever an authority having jurisdiction, e.g., a building code official or fire marshall, implements/requires more stringent policies than the WAP requirements then the AHJ’s rules must apply.
- Foam products can be purchased and/or installed by the WAP within accessible living space and left uncovered if an AHJ has formally approved the uncovered installation in writing. The approval shall be recorded in the HES project file for it to be considered a viable approval.
- In any rental properties or 2 (+) dwelling unit buildings, all foam installed at the boxsill/rimjoist perimeter during a WAP project shall be covered with an appropriate barrier per the policies of the AHJ.
- At this time, foam products can be purchased and/or installed by the WAP at the boxsill/rimjoist perimeter without a thermal or ignition barrier in owner-occupied 1-dwelling unit buildings only (unless a town has appointed another AHJ with authority that extends to owner-occupied 1-dwelling unit buildings).
- Even in an owner-occupied 1-dwelling unit home, all of the foam purchased and/or installed by the WAP at the boxsill/rimjoist perimeter shall be covered with an appropriate barrier whenever the foam installation continues more than one-inch down the interior facing side of the foundation wall.

Definitions

Accessible v. Non-Accessible Living Space

- Any area of the home that would require the use of tools, a ladder or a pull-down staircase in order for a person to gain access into the space can be considered non-accessible living space.
- All other spaces within the home shall be considered accessible living space.
- The vertical or horizontal assembly that separates the accessible living space from the non-accessible living space shall be the surface where the thermal or ignition barrier requirement is applied.
Appendix P: Thermal Barriers

Definitions (continued)

Thermal Barrier

In section R316.4, the International Residential Code (IRC) defines a thermal barrier as ½-inch gypsum wallboard or a material that is equal in fire resistance to ½-inch gypsum wallboard.

Ignition barrier

In section R316.5.3 of the IRC, ignition barriers are defined as 1 and ½-inch thick mineral fiber insulation; ¼-inch thick wood structural panels; 3/8-inch-thick particleboard; ¼-inch-thick hardboard; 3/8-inch-thick gypsum board; or corrosion-resistant steel.

Intumescent Coating

An intumescent coating is neither a thermal or ignition barrier because it is difficult to measure the installed thickness. However, intumescent coating is allowable to use as an alternative to either type of barrier when it (a) passes the applicable thermal or ignition barrier testing requirements and (b) the spray foam manufacturer has approved the coating to be used with their product.